

**CLAIM AMENDMENTS****Claim 1. (Canceled)****Claim 2. (Canceled)****Claim 3. (Currently Amended)** A microfluidic device comprising:

a substrate having a planar surface and at least one microfluidic unit formed therein, each microfluidic unit having at least one reservoir with an opening in said surface such that said opening is surrounded by a collar in relief, and wherein said collar is covered with a lid of a conformable material and wherein said collar has its inner surface aligned with the inner surface of said opening and a thickness of from about 0.05 to 0.5 mm thick extending away from said inner surface.

**Claim 4. (Canceled)****Claim 5. (Previously Presented)** A microfluidic device according to Claim 3 produced by plastic molding.**Claim 6. (Canceled)****Claim 7. (Canceled)****Claim 8. (Currently Amended)** A microfluidic device according to Claim 6 Claim 17, wherein at least a portion of said reservoirs are positioned in accordance with a 96, 384 or 1536 microtiter well format.**Claim 9. (Canceled)****Claim 10. (Currently Amended)** A microfluidic device according to Claim 6 Claim 17, wherein said lid is a portion of a continuous film.

**Claim 11. (Currently Amended)** A microfluidic device according to Claim 6 Claim 17, wherein said substrate comprises an acrylic polymer and is molded.

**Claims 12-16. (Canceled)**

**Claim 17. (New)** A microfluidic device comprising:

a substrate having a planar surface and at least one microfluidic unit formed therein, each microfluidic unit comprising one or more operational units each comprising at least two reservoirs connected by at least one microchannel in said substrate wherein each of such reservoirs has an opening in said surface and a volume in the range of about 10 nl to 10  $\mu$ l, such that each said opening is surrounded by a collar in relief, said collar being covered with a lid of a conformable material;

and such that each said opening has an inner surface aligned with an inner surface of a reservoir and the collar has a height in the range of about 0.1 to 1 mm and a thickness of from about 0.05 to 0.5 mm thick extending away from said inner surface.